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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/845,190	05/01/2001	Christophe Vermeulen	Q64091	2556

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EXAMINER

OSMAN, RAMY M

ART UNIT PAPER NUMBER

2157

DATE MAILED: 11/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/845,190	VERMEULEN, CHRISTOPHE	
	Examiner	Art Unit	
	Ramy M Osman	2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☒ Claim(s) 10-13 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Objections

1. Claims 10,11 and 12 objected to because of the following informalities:
Insert a colon after the word comprising, to be “comprising:”.
2. Claim 10 objected to because of the following informalities:
Change “system,” to “system;” on lines 4 and 12 of the claim.
3. Claim 11 objected to because of the following informalities:
Improper format lacking colon and indentation of claim elements. Where a claim sets forth a plurality of steps, each step of the claim should be separated by a line indentation, 37 CFR 1.75(i).
4. Claim 13 objected to because of the following informalities:
Change “Search engine” to “A search engine” on line 1 of the claim.
Change “transmitter” to “a transmitter on line 9 of the claim.
Appropriate action is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
6. Claim 1 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the

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invention. Applicant states “providing a cache memory”, but there is no indication as to who is providing the cache memory, the file system or the client.

7. Claim 7 rejected under 35 U.S.C. 112, second paragraph, as being indefinite. Applicant states “computes and returns the hash code”, but fails to indicate where the hash code is returned to.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. **Claims rejected under 35 U.S.C. 102(e) as being anticipated by Logue et al. (US Patent No 6,647,421).**

10. In reference to claim 1, Logue teaches a method of loading a file from a distributed file system into a client comprising the steps of:

providing a cache memory for temporarily storing loaded files; prior to each loading process, checking the cache memory see whether a file to be loaded is present in the cache memory or not; loading the file from the cache memory, if the file is in the cache memory; and loading the file from the distributed file system otherwise; (Summary and column 5 lines 7-45)

wherein the step of checking the cache memory comprises computing a hash code from the file to be loaded; and checking the cache memory by means of the hash code, see whether the file is contained in the cache memory. (column 9 line 55 – column 10 line 23, column 10 lines 40-67 and column 11 lines 10-55)

11. In reference to claim 2, Logue teaches a method as claimed in claim 1 wherein the distributed system is a network with a plurality of servers. (column 3 lines 35-67 and figure 1)

12. In reference to claim 3, Logue teaches a method as claimed in claim 2 wherein the network Internet or an intranet. (column 1 lines 30-55 and column 3 lines 25-55)

13. In reference to claim 4, Logue teaches a method as claimed in claim 1 wherein the cache memory is provided in a proxy server interposed between the distributed file system and the client. (column 5 lines 7-45 and figure 4)

14. In reference to claim 6, Logue teaches a method as claimed in claim 1 wherein the hash code is computed via the MD5 algorithm. (column 9 line 55 – column 10 line 23, column 10 lines 40-67)

15. In reference to claim 7, Logue teaches a method as claimed in claim 1 wherein the client sends request to a server from which the file is to be loaded, wherein the server then computes and returns the hash code, and wherein subsequently the checking of the cache contents is done by means of the hash code (figure 4, column 5 lines 7-45, column 9 line 55 – column 10 line 23 and column 11 lines 10-57)

16. In reference to claim 8, Logue teaches a method as claimed in claim 1 wherein the hash code is defined in a hypertext link pointing at the file to be loaded. (summary, column 9 line 55 – column 10 line 23 and column 10 lines 40-67)

17. In reference to claims 10 and 11, Logue teaches a client for loading files from a distributed file system, particularly from the internet, comprising:

a main memory for storing the files; an interface to the file system; a cache memory for temporarily storing loaded files; (column 3 lines 25-45 and column 4 lines 1-26)

a control unit controlling the loading of the files and for controlling the cache memory, said control unit being adapted check prior to each loading of a file whether the file to be loaded is present in the cache memory or not and, if the file is in the cache memory, to load it from the cache memory and otherwise load it from the distributed file system; (Summary, column 5 lines 7-45 and claims 1-3)

wherein the control unit is adapted to perform the check as whether the file be loaded is present in the cache memory or not by means of a hash code computed from the file (column 9 line 55 – column 10 line 23 and column 10 lines 40-67)

18. In reference to claim 12, Logue teaches a server of a distributed file system, particularly a file server or Web server, which is adapted to make files available to clients via a network for loading, comprising an arithmetic unit for computing a hash code for each of the files (Summary).

Claim Rejections - 35 USC § 103

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. Claim 5 rejected under 35 U.S.C. 103(a) as being unpatentable over Logue et al. (US Patent No 6,647,421) in view of Toh et al (US Patent No 6,128,652).

Logue teaches the method of claim 1 above. Logue fails to explicitly teach wherein the cache memory is the provided in the client. Checking local memory for previously loaded files and resources is well known in the art and is taught by Toh and others for the purpose of accelerating file requests. (Abstract and Summary)

It would have been obvious for one of ordinary skill in the art to modify Logue by making the cache memory provided on the client as per the teachings of Toh so as to accelerate file requests.

21. Claims 9 and 13 rejected under 35 U.S.C. 103(a) as being unpatentable over Logue et al. (US Patent No 6,647,421) in view of Monier (US Patent No 5,974,455).

22. In reference to claim 9, Logue teaches the method of claim 1 above. Logue fails to explicitly teach wherein if the file to be loaded is not contained in the cache memory, request is made to a search engine to retrieve an address at which the file can be found in the distributed file system.

However, Monier teaches wherein if the file to be loaded is not contained in the cache memory, request is made to a search engine to retrieve an address at which the file can be found in the distributed file system so as to efficiently locating and fetching web documents. Monier discloses if the file to be loaded is not contained in the cache memory, request is made to a search engine to retrieve an address at which the file can be found in the distributed file system (Summary, column 5 lines 20-67, column 7 lines 9-31 and column 8 lines 15-65)

It would have been obvious for one of ordinary skill in the art to modify Logue where if the file to be loaded is not contained in the cache memory, request is made to a search engine to retrieve an address at which the file can be found in the distributed file system as per the teachings of Monier so as to efficiently locating and fetching web documents.

23. In reference to claim 13, Logue teaches the method of claim 1 above which includes comparator for comparing the hash defined in the query with hash codes of files registered with the search engine and for retrieving the address of the file to be loaded if the comparison yields a file with the same hash code (Summary, column 9 line 55 – column 10 line 23 and column 10 lines 40-67). Logue fails to explicitly teach a receiver for receiving a query defining a hash code of the file to be loaded; and transmitter for transmitting back a query result containing the address of the file to be loaded if this is found and an error message otherwise.

However, Monier teaches wherein if the file to be loaded is not contained in the cache memory, request is made to a search engine to retrieve an address at which the file can be found in the distributed file system so as to efficiently locating and fetching web documents. Monier discloses a receiver for receiving a query defining a hash code of the file to be loaded; and

transmitter for transmitting back a query result containing the address of the file to be loaded if this is found and an error message otherwise (Summary, column 5 lines 20-67, column 7 lines 9-31 and column 8 lines 15-65)


It would have been obvious for one of ordinary skill in the art to modify Logue where if the file to be loaded is not contained in the cache memory, request is made to a search engine to retrieve an address at which the file can be found in the distributed file system as per the teachings of Monier so as to efficiently locating and fetching web documents.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramy M Osman whose telephone number is (571) 272-4008. The examiner can normally be reached on M-F 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RMO
November 7, 2004


SALEH NAJJAR
PRIMARY EXAMINER